comprises the step of displacing the plunger within the housing.

14. The method of claim 1 comprising the steps of biasing the needle rearwardly and releasably retaining the needle against the rearward bias.

15. The method of claim 14 comprising the step of releasing the needle after the step of collecting fluid so that the needle is automatically retracted rearwardly by a biasing element.

16. The method of claim 15 wherein the method comprises the step of displacing the plunger rearwardly, and the step of releasing the needle occurs in response to displacing the plunger rearwardly.

17. The method of claim 15 wherein the device includes an actuator wherein the step of releasing the needle comprises manually operating the actuator.

18. The method of claim 1 comprising the step of maintaining the needle in a fixed axial position relative to the housing while a majority of the fluid is collected in the housing.

19. The method of claim 1 wherein the housing comprises a reservoir and the step of collecting fluid comprises collecting fluid in the reservoir and the step of expelling comprises expelling the fluid from the reservoir in the housing.

20. The method of claim 1 wherein the housing comprises a port and the step of collecting comprises collecting fluid through the port and the step of expelling comprises expelling the fluid through the port.

21. The method of claim 1 comprising the step of venting air from the housing during the step of collecting fluid.

22. The method of claim 1 wherein the device includes a needle assembly comprising the needle and a hub having a first connector, and the housing comprises a second connector cooperable with the first connector, and the method comprises the step of connecting the first connector to the second connector.

23. The method of claim 22 comprising the step of removing the hub from the barrel prior to the step of expelling fluid from the housing.

24. The method of claim 1 wherein the plunger comprises a piston and the method comprises the step of removing the piston from the plunger.

25. The method of claim 1 wherein the step of expelling comprises expelling the fluid while the needle is retracted in the housing.

26. The method of claim 1 wherein the step of collecting fluid comprises displacing the plunger rearwardly by the fluid pressure of the fluid being collected.

A2 Cont

27. A method for withdrawing a fluid sample from a patient, comprising the steps of:

a. providing a sampling device having a housing and a needle having a sharpened tip for piercing the patient;

b. providing a biasing element to bias the needle rearwardly toward a retracted position in which the sharpened tip of the needle is shielded to prevent inadvertent contact with the sharpened tip;

c. releasably retaining the needle in a fixed axial position against the bias of the needle;

d. collecting fluid from the patient into a reservoir in the housing;

e. releasing the needle so that the biasing element displaces the needle

into the retracted position; and

d. expelling the fluid from the reservoir in the housing after the needle is retracted.

28. The method of claim 27 wherein the device comprises a plunger displaceable within the housing and the step of expelling fluid comprises the step of displacing the plunger within the housing.

29. The method of claim 28 wherein the step of releasing comprises releasing the needle so that the needle is displaced into the plunger.

30. The method of claim 28 wherein the method comprises the step of displacing the plunger rearwardly, and the step of releasing the needle occurs in response to displacing the plunger rearwardly.

A2 Cont

31. The method of claim 28 wherein the step of collecting fluid comprises displacing the plunger rearwardly by the fluid pressure of the fluid being collected.

32. The method of claim 27 wherein the device includes an actuator wherein the step of releasing the needle comprises manually operating the actuator.

33. The method of claim 27 wherein the step of retaining the needle comprises maintaining the needle in a fixed axial position relative to the housing while a majority of the fluid is collected in the housing.

34. The method of claim 27 wherein the housing comprises a port and the step of collecting comprises collecting fluid through the port and the step of expelling comprises expelling the fluid through the port.

35. The method of claim 27 comprising the step of venting air from the housing during the step of collecting fluid.

36. The method of claim 27 wherein the device includes a needle assembly comprising the needle and a hub having a first connector, and the housing comprises a second connector cooperable with the first connector, and the method comprises the step of connecting the first connector to the second connector.

37. The method of claim 36 comprising the step of removing the hub from the barrel prior to the step of expelling fluid from the housing.

38. The method of claim 27 comprising the step of sealing the housing after the step of releasing the needle.

A2 Cont.

39. The method of claim 27 comprising the step of analyzing the oxygen levels of the collected fluid.

40. The method of claim 27 wherein the step of releasing comprises releasing the needle while the collected fluid is in the housing.

41. The method of claim 27 wherein the step of expelling comprises expelling the fluid while the needle is retracted in the housing.

42. A method for withdrawing a fluid sample from a patient, comprising the steps of:

a. providing a sampling device having a housing having a first connector and a plunger;

b. providing a needle assembly comprising a hub having a second connector cooperable with the first connector, and a needle having a

sharpened tip for piercing the patient;

c. connecting the second connector to the first connector to attach the needle assembly to the housing;

b. collecting fluid from the patient in the housing;

c. retracting the needle so that the sharpened tip of the needle is shielded to prevent inadvertent contact with the sharpened tip; and

d. expelling the fluid from the housing after the needle is retracted.

43. The method of claim 41 wherein the step of expelling fluid comprises the step of displacing the plunger within the housing.

44. The method of claim 42 wherein the needle assembly comprises a biasing element biasing the needle rearwardly.

Q2 Cont'd

45. The method of claim 44 comprising the step of releasing the needle after the step of collecting fluid so that the needle is automatically retracted rearwardly by the biasing element.

46. The method of claim 45 wherein the method comprises the step of displacing the plunger rearwardly, and the step of releasing the needle occurs in response to displacing the plunger rearwardly.

47. The method of claim 42 wherein the device includes an actuator wherein the step of releasing the needle comprises manually operating the actuator.

48. The method of claim 42 comprising the step of maintaining the needle in a fixed axial position relative to the housing while a majority of the fluid is collected in the housing.

49. The method of claim 42 wherein the housing comprises a reservoir and the

step of collecting fluid comprises collecting fluid in the reservoir and the step of expelling comprises expelling the fluid from the reservoir in the housing.

50. The method of claim 42 wherein the housing comprises a port and the step of collecting comprises collecting fluid through the port and the step of expelling comprises expelling the fluid through the port.

51. The method of claim 42 comprising the step of venting air from the housing during the step of collecting fluid.

52. The method of claim 42 comprising the step of removing the hub from the barrel prior to the step of expelling fluid from the housing.

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53. The method of claim of claim 52 comprising the step of sealing the housing prior to or during the step of removing the hub.

54. The method of claim 42 wherein the step of retracting comprises retracting the needle into the needle assembly.

55. The method of claim 42 comprising the step of sealing the housing after the step of retracting.

56. The method of claim 42 comprising the step of analyzing the oxygen levels of the collected fluid.

57. The method of claim 42 wherein the step of retracting comprises retracting the needle while the collected fluid is in the housing.

58. The method of claim 42 wherein the step of expelling comprises expelling the fluid while the needle is retracted in the housing.